

Nevada Division of Environmental Protection
Fact Sheet (pursuant to NAC 445A.236)

Permittee: SemMaterials LP
6400 S Fiddler's Green Circle Ste 1750
Greenwood Village CO 80111

Permit No.: NEV88005

Facility: SemMaterials LP
3901 W Ponderosa Way
Clark County
Latitude 36° 04' 58" N
Longitude 115° 11' 30" W
T21S R60E S36

General: Formerly known as Koch Performance Asphalt, the SemMaterials LP facility is an asphalt plant with an evaporation pond for boiler blowdown, water softener regeneration, reverse osmosis backwash, boiler bottom blowdown, and cooling tower bleedoff wastestreams. The pond is asphalt lined, with dimensions of 190 ft by 90 ft, and a depth of 10 ft. A monitoring well completed to the native caliche layer at a depth of 20 ft is checked periodically for leakage - none has been found. There are no public water supply wells in the area.

Basis for Permit Requirements: The monitoring requirements, discharge limits, and a summary of the semi-annual monitoring conducted under the previous permit from May 2002 through December 2006 are presented in the two tables below and form the basis for the discussion that follows.

Discharge Limitations

Parameter	Discharge Limitations	Monitoring Requirements	
		Measurement Frequency	Sample Type
Flow ¹ , gpd	m & r	continuous	estimate
TDS, mg/l	m & r	quarterly	discrete
TPH (C6 - C36), mg/l	m & r	quarterly	discrete
pH, su	m & r	quarterly	discrete
Metals ² , mg/l	m & r	quarterly	discrete

1. Total for all wastestreams; report average gpd for each month.

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- Analyses shall include antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, zinc, and hardness as calcium carbonate. Analyses shall be for total metals.

Discharge Monitoring Results ¹ May 2002 through December 2006

mg/l except as noted	count	min	avg	max
parameter				
flow , gpd	54	257	1860	6560
boiler blowdown				
pH, su	9	10.65	11.52	12.06
TDS	9	2280	3542	4966
water softener				
pH, su	9	7.09	7.83	8.24
TDS	9	54	607	756
RO unit				
pH, su	9	6.28	7.56	8.56
TDS	9	46	349	967
evap pond				
GRO				
DRO				
ORO				
Sb				
As				
Be				
Cd				
Cr	1	0.02	0.02	0.02
Cu	5	0.01	0.03	0.08
Pb				
Hg				
Ni				
Se				
Ag				
Tl				
Zn	7	0.01	0.10	0.22

1. Blanks indicate the parameter was not detected.

SAMPLING LOCATION and FREQUENCY: This frequency has been changed from twice a year for TDS, pH, and TPH, and once a year for metals, to quarterly - in the interest of building a more meaningful data set. The individual wastestream sampling has been eliminated in favor of sampling the pond only, as the water in the pond is what

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would be of interest in the event of a leak, and wastestream characterization serves no real purpose relative to the function of this permit.

FLOW, monitor & report: This data would be useful if pond capacity became an issue. The boiler blowdown, water softener regeneration, and reverse osmosis backwash wastestreams report to a single sump with a flowmeter. The boiler bottom blowdown wastestream results from manually turning a valve for 15 sec twice a day - this much hot water in the sump wouldn't be safe, so it's routed directly to the evaporation pond at an estimated maximum flow of 240 gpd. Cooling tower bleedoff also goes directly to the pond, due to the proximity of the unit, at an estimated maximum of 288 gpd. In addition, the pond receives unmeasured sheet flow from a small adjacent drainage area. Reported flows, including the estimated maximums described above, have ranged from 257 to 6560 gpd, with an average of 1860 gpd.

TOTAL DISSOLVED SOLIDS (TDS), monitor & report: TDS would help identify the source, and impact, in the event of a leak.

pH, monitor & report: A non-typical pH result would indicate some type of process or other upset.

TOTAL PETROLEUM HYDROCARBONS (TPH) (C6 - C36), monitor & report: GRO, DRO, and ORO stand for gas, diesel, and oil range organics, respectively. As organics are not normally present, any detections would indicate the introduction of an unknown and inappropriate wastestream.

METALS, monitor & report: These are the priority pollutant metals, plus hardness. The presence of some metals is expected in boiler and cooling tower discharges due to the materials and temperatures involved. The detections are mostly for copper and zinc, with chromium showing up one time.

DUST CONTROL: If the evaporation pond needs to be drained for maintenance purposes the water may be applied to unpaved portions of the site for dust control so long as standing water is minimized and

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human contact and off site discharge are prevented. This use would normally occur every five years.

Compliance Issues There have been no significant compliance issues regarding the operation of this facility.

Schedule of Compliance A revised operations and maintenance manual has been required due to changes in the permit.

Procedures for Public Comment The Notice of the Division's intent to renew water pollution control permit NEV88005 authorizing continued use of the evaporation pond serving the SemMaterials asphalt plant is being sent to the Las Vegas Review Journal for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline by which all written comments are to be postmarked or hand delivered to the Division is 5:00 PM Tuesday August 21, 2007.

A public hearing on the proposed determination can be requested by the applicant, any affected state or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. All public hearings must be conducted in accordance with NAC 445A.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination: The Division has made the tentative determination to renew the proposed discharge permit for a five year term.

Prepared by: Robert J. Saunders
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Bureau of Water Pollution Control
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